

What is claimed is:

1. A vacuum tumbler for marinating food products within a liquid, the vacuum tumbler comprising:

5 a container having an interior wall, said interior wall defining a chamber for containing the liquid;

a rib extending inwardly from said interior wall at least one-quarter of the distance across said chamber;

10 a drive for moving the container so that the rib brings the food products into and out of contact with the liquid; and

a vacuum source for creating a partial vacuum within said chamber.

15 2. The tumbler of claim 1 wherein said drive rotates said container about an axis of rotation and said rib extends toward said axis of rotation.

3. The tumbler of claim 1 wherein said rib is in a plane with the axis of rotation.

20 4. The tumbler of claim 1 wherein the tumbler includes only a single rib.

5. The tumbler of claim 1 wherein said rib is perforated.

6. The tumbler of claim 1 wherein said container is spherical.

25 7. The tumbler of claim 1 wherein said chamber is cylindrical.

8. The tumbler of claim 7 wherein said chamber includes a longitudinal axis, said drive rotating said container about said longitudinal axis.

30 9. The tumbler of claim 8 wherein said rib is in a plane with said longitudinal axis and said rib extends one-half of the radius of said chamber across said chamber.

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10. The tumbler of claim 9 wherein said rib extends a distance across said chamber approximately equal to the radius of said chamber.

5 11. The tumbler of claim 10 wherein said chamber has a length in the direction of said longitudinal axis, and wherein said rib extends substantially the entire length of said chamber.

10 12. The tumbler of claim 7 wherein said chamber includes a longitudinal axis, said drive rotating said container about an axis of rotation that is substantially perpendicular with said longitudinal axis.

13. The tumbler of claim 12 wherein said rib extends entirely across said chamber.

15 14. The tumbler of claim 1 wherein said rib is part of an insert secured to said interior wall.

20 15. The tumbler of claim 14 wherein said insert includes a mounting section having an inner surface, an outer surface, said outer surface being shaped to mate with a portion of said interior wall within said container and said rib extending from said inner surface into said chamber, said mounting section also including opposing edges with extensions projecting from said opposing edges into said chamber, said container including projections extending inward from said interior wall into said chamber such that said extensions on said mounting section are compressed between said projections.

16. A method of marinating food products, said method comprising:
loading the food products into a container;
partially filling the container with a marinating liquid;
5 creating a partial vacuum within the container; and
maneuvering the food products to alternately expose substantially all of the food
products to the marinating liquid and to the partial vacuum.

17. The method of claim 16 wherein said maneuvering the food product to
10 alternately expose substantially all of the food products to the marinating liquid and the
partial vacuum includes rotating the container about an axis of rotation.

18. The method of claim 17 wherein the chamber is cylindrical and includes a
longitudinal axis that is substantially aligned with the axis of rotation during said rotating
15 the container about an axis of rotation.

19. The method of claim 17 wherein the chamber is cylindrical and includes a
longitudinal axis that is substantially perpendicular to the axis of rotation during said
rotating the container about an axis of rotation.
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20. The method of claim 16 wherein said maneuvering the food product to
alternately expose substantially all of the food products to the marinating liquid and the
partial vacuum includes moving the food products up and down.

21. The method of claim 20 wherein said moving the food product up and
down to alternately expose substantially all of the food products to the marinating liquid
and the partial vacuum includes placing the food product on a shelf and moving the shelf
up and down.
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22. The method of claim 21 wherein said moving the food product up and
down to alternately expose substantially all of the food products to the marinating liquid
and the partial vacuum includes adjusting the shelf up and down along a vertical axis.
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23. The method of claim 16 wherein all of the food products are removed from the liquid at one time during said maneuvering the food products to alternately expose substantially all of the food products to the marinating liquid and to the partial vacuum.

24. A device for marinating food products within a liquid, the device comprising:

- 5 a container defining a chamber for containing the liquid;
a shelf extending at least partially across said chamber;
a drive for maneuvering said shelf to bring the food products into and out of contact with the liquid; and
a vacuum source for creating a partial vacuum within said chamber.

10 25. The device of claim 24 wherein said shelf is perforated.

26. The device of claim 25 wherein said shelf extends across said entire chamber.

15 27. The device of claim 24 wherein said container is cylindrical.

28. The device of claim 24 wherein said shelf moves relative to said container.

20 29. The device of claim 28 wherein said container includes a substantially vertical axis, said drive reciprocatingly maneuvering said shelf along said axis.

30. The device of claim 29 wherein said shelf is substantially perpendicular to said axis.

25 31. The device of claim 28 wherein said shelf moves up and down.